

FIG. 1

# DATABASE RECORD

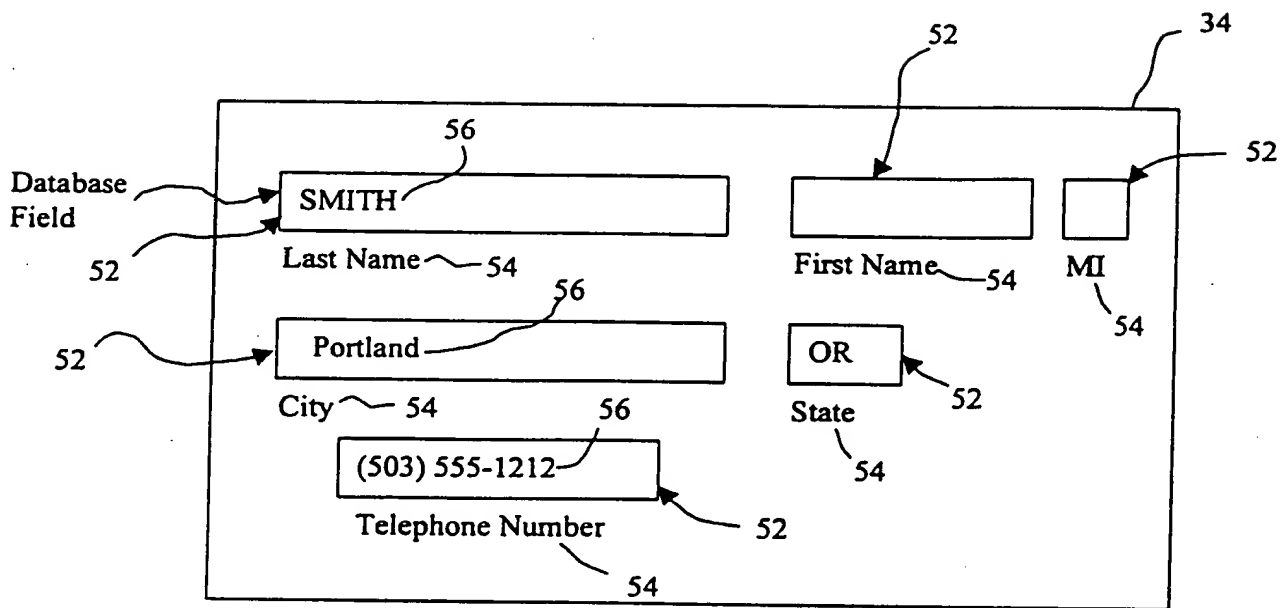


FIG. 2

# SEARCH-ROUTING DATABASE RECORD

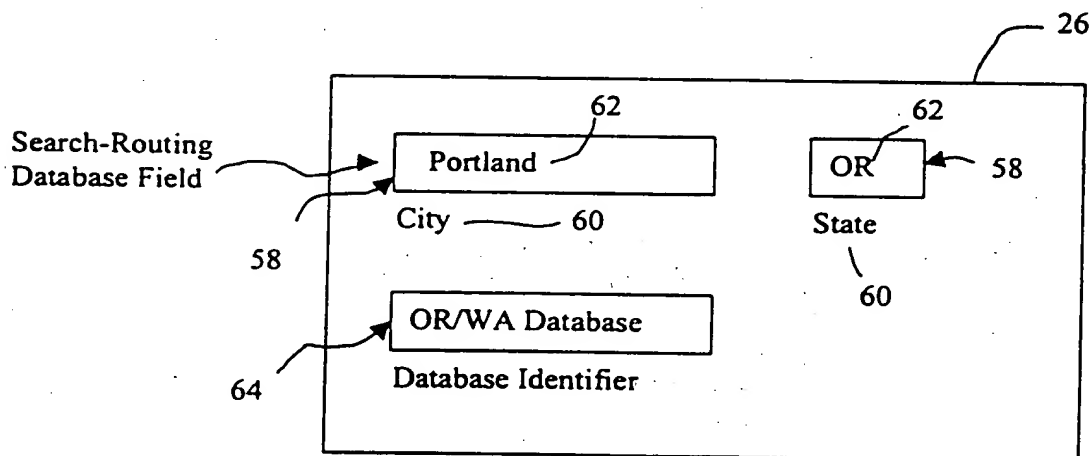


FIG. 3



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graph TD
    70[70] --- Obtain[OBTAIN SEARCH REQUEST]
    Obtain --> 71[71]
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    Obtain
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72 FORM MODIFIED  
SEARCH REQUEST

74 SEARCH SEARCH-ROUTING DATABASE USING MODIFIED SEARCH REQUEST

76

RESPONSIVE  
DATA LOCATED  
IN SEARCH-  
ROUTING  
DATABASE ?

```

graph TD
    80((80)) --> 80[RETURN  
PREDEFINED SET  
OF DATABASE  
IDENTIFIERS]
  
```

78

RETURN DATABASE  
IDENTIFIERS OF  
RESPONSIVE DATA

82 SEARCH IDENTIFIED DATABASE(S) USING ORIGINAL SEARCH REQUEST

83 — RETURN RESULTS  
OF SEARCH TO  
USER

**RETURN RESULTS  
OF SEARCH TO  
USER**

FIG. 5

Diagram illustrating the modification of a search request:

**Search Request (84):**

- Last Name: Smith
- First Name: Jon
- City: Portland
- State: OR
- Telephone Number: [Empty field]

**Modified Search Request (86):**

- City: Portland
- State: OR

Arrows indicate the flow of information, with label 88 pointing to the input fields and label 90 pointing to the 'City' and 'State' fields.

Figure 1 shows two examples of data entry forms. Form 92 (top) has a 'City' field containing 'Portland' and an empty 'State' field. Form 94 (bottom) has a 'City' field containing 'Portland', a 'Date' field containing '1/1/2000', and an empty 'State' field.

002220 2042E560

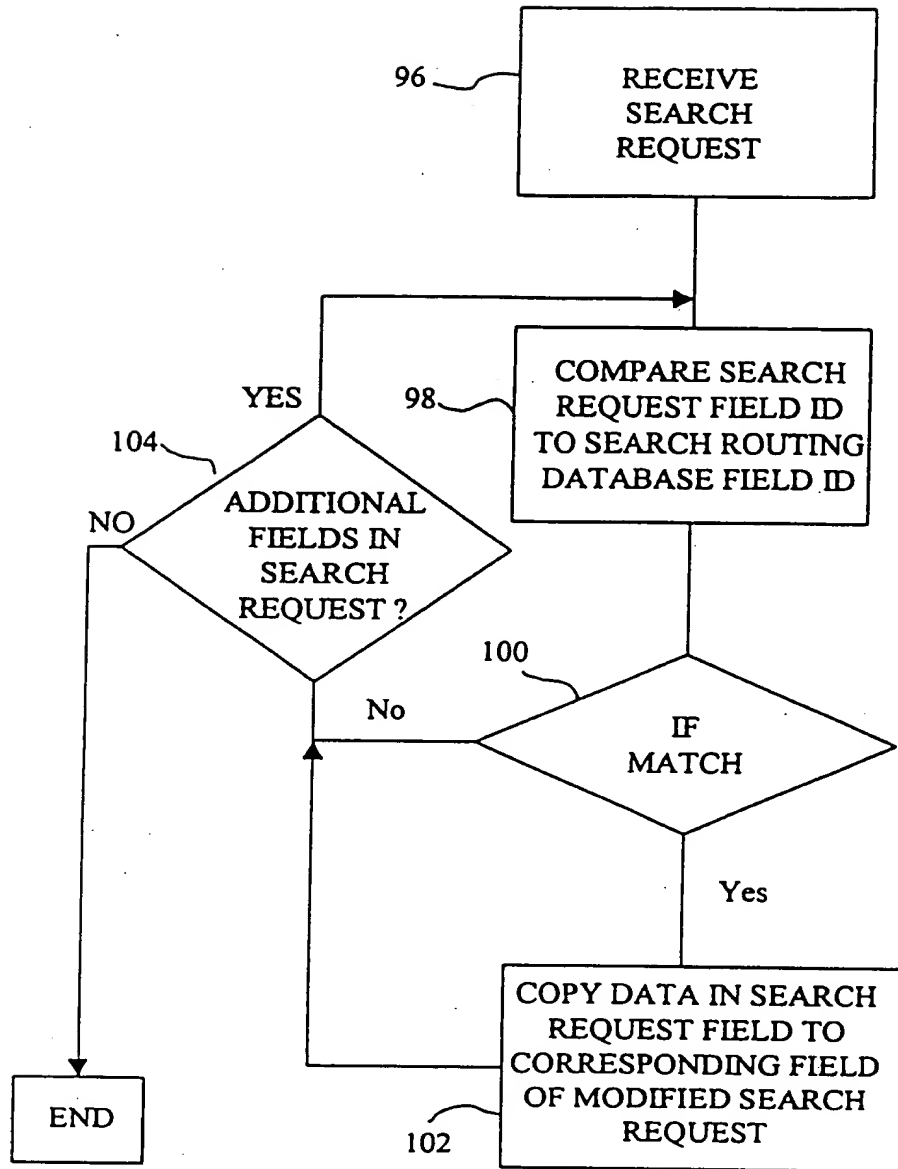


FIG. 7



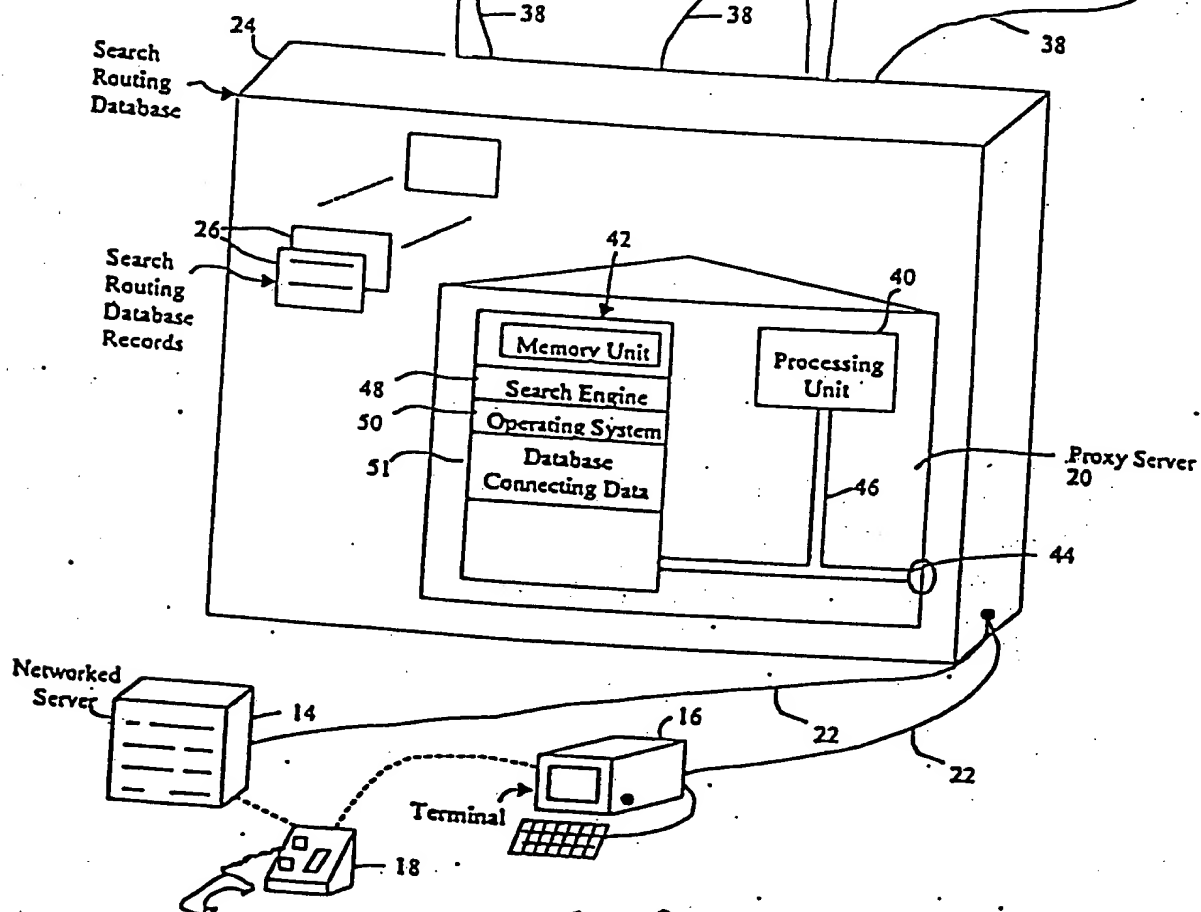


FIG. 9



# UPDATE DATABASE RECORD

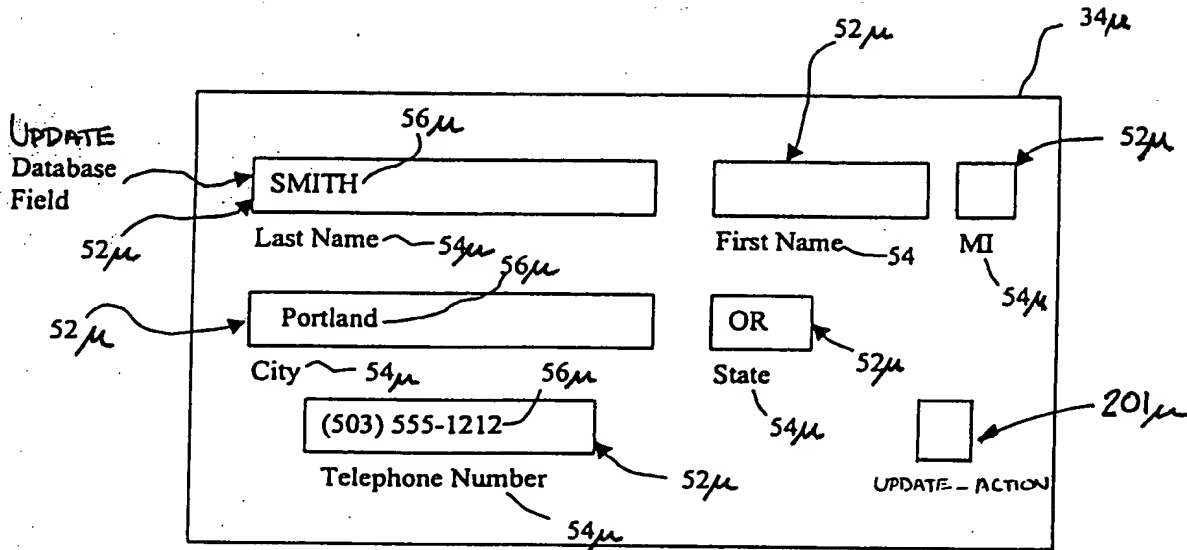


FIG. 10

# UPDATE SEARCH-ROUTING DATABASE RECORD

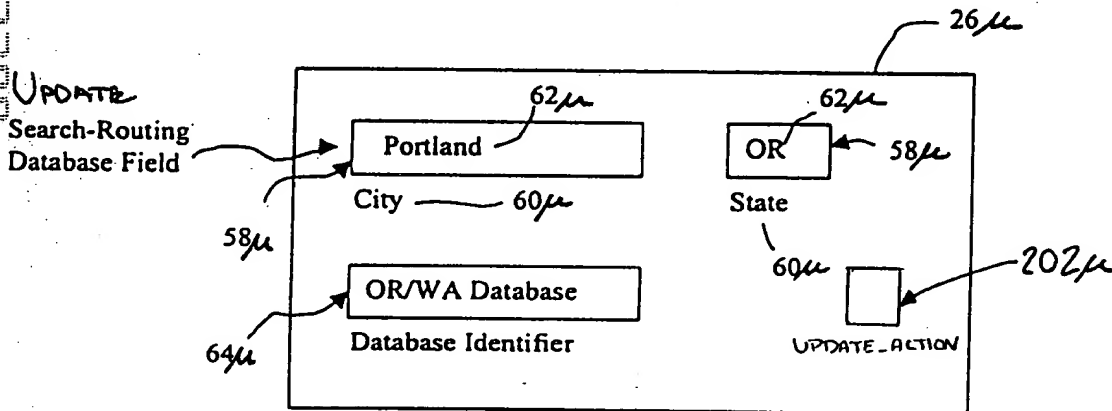


FIG. 11

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graph TD
    BEGIN{BEGIN} --> 70[OBTAIN SEARCH REQUEST]
    70 --> 72[FORM MODIFIED SEARCH REQUEST]
    72 --> 74[SEARCH SEARCH-ROUTING DATABASE USING MODIFIED SEARCH REQUEST]
    74 --> 76{RESPONSIVE DATA LOCATED IN SEARCH-ROUTING DATABASE?}
    76 -- N --> 80[RETURN PREDEFINED SET OF DATABASE IDENTIFIERS]
    76 -- Y --> 78[RETURN DATABASE IDENTIFIERS OF RESPONSIVE DATA]
    80 --> 82[SEARCH IDENTIFIED DATABASE(S) USING ORIGINAL SEARCH REQUEST]
    78 --> 82
    82 --> 84[SEARCH IDENTIFIED UPDATE DATABASE(S) USING ORIGINAL SEARCH REQUEST]
    84 --> 86[RETURN RESULTS OF SEARCH TO PROXY SERVER]
    82 --> 86
    86 --> 88{IS THE VALUE OF THE UPDATE ACTION FIELD "D"?}
    88 -- YES --> 90[REMOVE ALL RECORDS FROM SEARCH RESULT THAT ARE EQUIVALENT TO UPDATE RECORD]
    88 -- NO --> 92[RETURN RESULTS OF SEARCH OF ALL DATABASES TO USER]
    90 --> 92
  
```

FIG. 12